

AIR CONSTRUCTION PERMIT APPLICATION

Form EU1: Industrial Engine Information
Please see instruction on reverse side

EXEMPTION According to 567 Iowa Administrative Code Chapter 22.1(2)r, an internal combustion engine with a brake horsepower rating of less than 400 is exempted from the provisions of construction permits. Company Name: **ENGINE (EMISSION UNIT) DESCRIPTION AND SPECIFICATIONS** New Unit Unpermitted Existing Unit Modification to an unit with Permit #: (1) Use of Engine: Normal Operation Emergency Back-up Fire Pump (3) Rated Power: (4) Construction Date: (2) Engine ID Number: bhp KW (5) Manufacturer: (6) Manufacture Date: (7) Model Year & Model Number: (8) Engine Order Date: (9) Control Device (if any): (10) Displacement per cylinder (L): (11) Engine Ignition Type: (12) Engine Burn Type: (13) Date of Modification (if applicable): Spark Ignition Compression ☐ 2SLB ☐ 2SRB ☐ 4SRB **FUEL DESCRIPTION AND SPECIFICATIONS** Diesel Fuel (#) Gasoline Fuel ☐ Natural Gas Other Fuels (14)Fuel Type (gal/hr) (gal/hr) (cf/hr) (unit: (15)Full Load Consumption Rate (16)**Actual Consumption Rate** (17)N/A N/A Sulfur Content wt% **OPERATING LIMITS** (18) Requested Operating Limits (hours/year, or gallons fuel/year, etc.): STACK/VENT (EMISSION POINT) SPECIFICATIONS (19) Stack/Vent ID: (20) Stack Opening Size: circular, diameter (inches) is: (21) Stack Height (feet) from the Ground: other, size (inches x inches) is: ☐ Single Stack Dual Stack (22) Stack Height (feet) (23) Discharge Style: above the Building (If Applicable): ☐ V (Vertical, without rain cap or with unobstructing rain cap) VR (Vertical, with obstructing rain cap) (24) Distance (feet) from the Property Line: H (Horizontal discharge) D (Downward discharge; for example, a goose neck stack) I (Inside-Vent inside building) **EXHAUST INFORMATION** (25) Rated Flow Rate (☐ acfm ☐ scfm): (27) Exit Temperature (°F) (26) Moisture Content % (if known):

Instructions for Form EU1: Industrial Engine Information

According to IAC 567 22.1(2)r, an internal combustion engine with a brake horsepower rating of less than 400 is exempted from the provisions of construction permits.

Please put your company name in the box provided. This is useful in case any pages of the application are separated. **Engine Description and Specification:**

Please provide manufacturer's data with design specifications to support the information presented on this form.

- 1. Indicate the use of the engine. Please note that the state definition of emergency (IAC Chapter 20) is different than the federal definition of emergency (NSPS Subpart IIII and NESHAP Subpart ZZZZ)
- 2. Provide the engine identification number. Each engine in the application must have its own number. If engines involved in this permit application are not identical in make and model, fill out a separate EU-1 form for each engine. If the engines are identical, attach a separate sheet labeled EU-2A listing them by ID number and date of construction or modification. The ID number should match the ID numbers used on other construction permit applications and within this application. It can be any number. However, if you submitted an operating permit application, the numbers used for identification purposes in this application should be consistent with the ID numbers used in your operating permit application.
- 3. The rated power should be read from the engine's nameplate or from the manufacturer's literature.
- 4. The date of construction of the emission unit is the date, month, and year in which <u>construction or modification begins</u> as defined in EU Form Instruction item 7.
- 5. Provide the name of the manufacturer of the emission unit.
- 6. Provide the date the unit was manufactured by the manufacturer.
- 7. Provide the model year & the model number of the engine. This model number should be available from the nameplate of the engine.
- 8. Provide the date on which the engine is ordered. Per NSPS Subpart IIII this is considered the commence construction date.
- 9. Provide the control device name and number if a control device attached to this emission unit. The name and number of the control device should be consistent with form CE and throughout the application.
- 10. Provide the displacement per cylinder in liters.
- 11. Provide the engine ignition type. Please check either the box for Spark Ignition or Compression.
- 12. Provide the engine burn type. Please check one (1) from the list: 2SLB (2 Stroke Lean Burn), 2SRB (2 Stroke Rich Burn), or 4SRB (4 Stroke Rich Burn).
- 13. If the engine has been or will be modified, give the date, month and year of the future modification.

Fuel Description and Specifications:

- 14. Indicate the fuel type used by the engine. If diesel fuel is used, you need to indicate the ranking number. If the engine is a dual-fuel engine, please check the appropriate fuel type boxes in this row.
- 15. The full-load consumption rate is the fuel consumption rate at the engine's rated capacity.
- 16. The actual consumption rate is the fuel consumption rate (usually daily average) under a typical operational conditions.
- 17. Provide the weight percentage of the sulfur content in the diesel oil.

Operation Limits:

18. Indicate the operating limits you are requesting for the engine in the units of operating hours per year, or gallons fuel per hour, per year, etc.

Stack/Vent Information:

- 19. Provide the identification number(s) of the emission point(s). An emission point is the same as a stack or vent.
- 20. Indicate by checking a box whether the stack or vent opening is circular or other shape and write in the dimensions of the opening. Indicate the engine has a single stack or dual stacks.
- 21. Provide the height of the top of the emission point(s) above ground. If the engine has non-identical multiple stacks attach a sheet that indicates the heights and the information requested in (18) -(20) for each stack.
- 22. Provide the height of the top of the emission point(s) above the highest building, if applicable.
- 23. Indicate by checking a box what the discharge style is. If the emission unit(s) does not vent directly to the atmosphere but rather, vents into the building, mark Inside.
- 24. Provide the distance between the engine stack and the nearest property line.

Exhaust Information:

- 25. Indicate the rated exhaust flow rate in actual or standard cubic feet and check appropriate box.
- 26. Provide the moisture content, in percent, of the exhaust gas, if known. If unknown, leave blank.
- 27. Provide the temperature of the exhaust at the emission point in degrees Fahrenheit.